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**AMENDMENT** 

## APPENDIX: Claims as pending upon entry of the amendment

1. (amended) A method for inducing an immune response against transformed, infected or diseased tissue <u>in a patient</u> comprising

removing [only components present] <u>soluble cytokine receptor molecules selected from the group consisting of soluble tissue necrosis factor receptor-1 ("sTNFR-1"), soluble tissue necrosis factor receptor-2 ("sTNFR-2"), soluble interleukin-2 receptor ("sIL-2R"), soluble interleukin-1 receptor ("sIL-1R"), soluble interleukin-6 receptor ("sIL-6R"), and soluble interferon-gamma receptor ("sIFN-gammaR") in the blood of the patient having a molecular weight of 120,000 daltons or less, until the transformed, infected, or diseased tissue is reduced in amount.</u>

- 2. The method of claim 1 wherein the tissue is a solid tumor.
- 3. The method of claim 1 wherein the components are removed from one blood volume.
- 4. The method of claim 1 wherein the components are removed in multiple treatments.
- 5. (amended) [The] A method [of claim 1 further comprising] for treating [the tissue] a patient with tumors by removing from the blood the components having a molecular weigh tof 120,000 daltons or less in combination with an agent selected from the group consisting of antiangiogenic compounds, procoagulant compounds, cytokines, chemotherapeutic agents, and radiation.
- 6. The method of claim 5 wherein the agent is a cytokine and the cytokine is selected from the group consisting of GM-CSF, erythropoietin, thrombopoetin, G-CSF, M-CSF and SCF.
- 7. (amended) The method of claim 1 [further comprising selectively removing] wherein the soluble cytokine receptor molecules are removed by binding of the molecules to a filter.
- 8. (amended) The method of claim 7 wherein the soluble cytokine receptor molecules are selected from the group consisting of soluble tissue necrosis factor receptor-1 ("sTNFR-1")[,] and soluble tissue necrosis factor receptor-2 ("sTNFR-2")[, soluble interleukin-2 receptor ("sIL-2R"), soluble interleukin-1 receptor ("sIL-1R"), soluble interleukin-6 receptor ("sIL-6R"), and soluble interferon-gamma receptor ("sIFN-gammaR")].
- 9. The method of claim 8 wherein the cytokine receptor molecules are removed by binding to the cytokine or to an antibody or antibody fragment immunoreactive with the cytokine receptor molecules.
- 10. The method of claim 9 wherein the cytokine or antibody or antibody fragments are immobilized in a filter or column through which the patient's blood or plasma is circulated prior to being returned to the patient.
- 11. The method of claim 1 further comprising vaccinating the patient with a vaccine against the transformed, infected or diseased tissue.
- 12. (amended) A system for inducing an immune response against transformed, infected or diseased tissue comprising

a device for removing only components present in the blood having a molecular weight of 120,000 daltons or less, having inlet and outlet means for connection to a pump and tubing to recirculate the blood of a patient through the device, having immobilized therein absorbents selectively removing specific cytokine or cellular inhibitors selected from the group consisting of soluble tissue necrosis factor receptor-1 ("sTNFR-1"), soluble tissue necrosis factor receptor-2 ("sTNFR-2"), soluble interleukin-2 receptor ("sIL-2R"), soluble interleukin-1 receptor ("sIL-1R"), soluble interleukin-6 receptor ("sIL-6R"), and soluble interferon-gamma receptor ("sIFN-

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## gammaR") from the blood.

- 13. The system of claim 12 wherein the device is a capillary membrane filter with a pore size of between about 0.02 and 0.05 microns.
- 14. The system of claim 12 wherein the device is a parallel plate filter with a pore size of between about 0.04 and 0.08 microns.
- 15. The system of claim 12 wherein the device comprises filters with different pore sizes or geometries to provide for staggered removal of materials from the blood.
- 16. The system of claim 12 wherein the device is an absorbent column selectively removing specific cytokine or cellular inhibitors from the blood.
- 17. (amended) The system of claim 16 wherein the cytokine or cellular inhibitors are selected from the group consisting of soluble tissue necrosis factor receptor-1 ("sTNFR-1")[,] and soluble tissue necrosis factor receptor-2 ("sTNFR-2")[, soluble interleukin-2 receptor ("sIL-2R"), soluble interleukin-1 receptor ("sIL-1R"), soluble interleukin-6 receptor ("sIL-6R"), and soluble interferon-gamma receptor ("sIFN-gammaR")].
- 18. The system of claim 17 comprising cytokines or antibody or antibody fragments immunoreactive with the cytokine receptor molecules.
- 19. The system of claim 18 wherein the cytokine or antibody or antibody fragments are immobilized in a filter or column through which the patient's blood or plasma is circulated prior to being returned to the patient.
- 20. The system of claim 12 wherein the blood is plasma.
- 21. The system of claim 12 wherein the system includes means for administering radiation to the tissue.
- 22. A kit for treatment of a patient to induce an immune response against transformed, infected or diseased tissue comprising:
- a device for removing only components present in the blood having a molecular weight of 120,000 daltons or less and
- an agent selected from the group consisting of anti-angiogenic compounds, procoagulant compounds, cytokines, chemotherapeutic agents, and radiation, in a dosage formulation for treatment of the patient.
- 23. The kit of claim 22 wherein the agent is an anti-angiogenic compound.
- 24. The kit of claim 22 wherein the agent is a procoagulant compound.
- 25. The kit of claim 22 wherein the agent is a cytokine.
- 26. The kit of claim 25 wherein the cytokine is selected from the group consisting of GM-CSF, erythropoietin, thrombopoetin, G-CSF, M-CSF and SCF.
- 27. The kit of claim 22 wherein the agent is a chemotherapeutic agent.
- 28. The kit of claim 27 wherein the agent is selected from the group consisting of alkylating agents, doxyrubicin, carboplatinum, cisplatinum, and taxol.
- 29. The kit of claim 22 further comprising anticoagulant to treat the device for removal of components from the blood prior to use.

Please add new claims 30, 31 and 32.

- 30. The method of claim 5 wherein the agent is an antiangiogenic compound.
- 31. The method of claim 30 wherein the agent is thalidomide.
- 32. The kit of claim 23 wherein the agent is thalidomide.

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